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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,187	09/29/2003	Jung-Seon Park	CU-3337 VE	2658
26530	7590	08/14/2006	EXAMINER	
LADAS & PARRY LLP 224 SOUTH MICHIGAN AVENUE SUITE 1600 CHICAGO, IL 60604			GUIDOTTI, LAURA COLE	
			ART UNIT	PAPER NUMBER
			1744	

DATE MAILED: 08/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/674,187	PARK ET AL.
Examiner	Art Unit	
Laura C. Guidotti	1744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### **Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 14 July 2005.

2a)  This action is **FINAL**.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## **Disposition of Claims**

4)  Claim(s) 1-17 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5)  Claim(s) \_\_\_\_\_ is/are allowed.  
6)  Claim(s) 1,4,5,7,10,11 and 13-16 is/are rejected.  
7)  Claim(s) 2,3,6,8,9,12 and 17 is/are objected to.  
8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on 26 September 2003 is/are: a)  accepted or b)  objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 0305.0604.  
4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1, 4, 13, 15, 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Ohta et al., US 6,859,975.

Regarding claims 1 and 16, Ohta et al. disclose the claimed invention including a nozzle assembly for drawing in air (3), a main body having a cyclone dust collector (4), a dust receptacle (formed by lowermost portions of walls and bottom of 4 that receives the dust), a main body frame having an upper casing and a lower casing (the main body frame being the outer walls of 4, upper casing of 4 is the uppermost part near 47a as shown in Figure 2 and the lower casing is the lower portions of 4), a button operation portion formed on an upper part of the main body frame (48b, Figure 4), and a connecting projection (the vertical extension of 48b that engages 1a, see Figures 3-4; Column 7 Lines 1-4) integrally formed with the button operation portion capable of moving together with the button operation portion (Figures 3-4; Column 7 Lines 1-4), and a frame portion (1) pivotably connected with the nozzle assembly (Column 5 Lines 1-4) having a connecting groove capable of receiving the connecting projection therein

(1a; Column 4 Lines 1-4). Regarding claim 4, the main body comprises a handle portion to permit a user to grab on the upper part (47a). Regarding claim 13, the connecting groove (1a) further includes a slanted part (as shown in Figure 3, the portion 1a slants at a downward angle). Regarding claim 15, the frame portion has a frame handle portion (14) extending upwardly from the top of the frame portion (Figure 1) and a handle recess corresponding to the button operation of the main body (either 1a or the slanted recess formed of 1 to receive the button operation, Figure 4).

2. Claims 1, 4-5, 7, 11, 14, and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Hamada et al., US 6,735,818.

Regarding claims 1 and 16, Hamada et al. disclose the claimed invention including a nozzle assembly (1), a main body (3) having a cyclone dust collector (it is well known that the configuration of filters 8 and 9, the shape as shown in Figure 3, and the fact that the vacuum does not use bags infers that it is a cyclonic dust collector as air filters trap debris while clean air continues its path through the remainder of the vacuum), a dust receptacle for collecting (8, 9), a main body frame having an upper casing and a lower casing (the walled frame structure of 3 is the main body frame, the upper casing is the uppermost portion of the frame structure of 3 as shown in Figure 3 and the lower casing is the lowermost portion of the frame structure of 3 as shown in Figure 3), a button operation portion formed on an upper part of the main body frame (24; Figure 4), a connecting projection (25, 25a) integrally formed with the button operation portion capable of moving together with the button operation portion (see Figures 4-6; Column 4 Lines 42-47), and a frame portion (2, all main vacuum cleaner

body components that do not include "1" which is the nozzle and suctioning tool body) pivotably connected with the nozzle assembly (Column 1 Lines 49-51) having a connecting groove capable of receiving the connecting projection therein (29; Column 4 Lines 32-34). Regarding claim 4, the main body (3) comprises a handle portion to permit a user to grab on the upper part (12; Column 3 Lines 44-46, 55-62). Regarding claim 5, the handle portion (12) is shaped to correspond to the shape of the button operation portion (as the handle shape is consistent with the shape of the button and changing a shape of the button would inherently affect the shape of the handle, and vice versa) and includes a hollow recess therein (12 has a hollow recess to receive a user's hand, see Figures). Regarding claim 7, the main body (3) further comprises a communicating member disposed at a bottom part of the main body (3a; Figure 3). Regarding claim 11, the frame portion further includes at least one supporter formed on at least one side thereof to provide support for the main body (21; Column 4 Lines 13-16). Regarding claim 14, the frame portion further comprises wheels on both sides of a bottom thereof to permit easier motion of the vacuum cleaner (4a, 4b).

3. Claims 1, 4, 7, 11, and 14-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Harmen, US 2002/0162188.

Regarding claims 1 and 16, Harmen discloses the claimed invention including a nozzle assembly (14; paragraph 19), a main body (22) having a cyclone dust collector (24, 40; paragraph 20), a dust receptacle for collecting (26, 42; paragraph 20), a main body frame having an upper casing and a lower casing (the walled frame structure of 22 is the main body frame, the upper casing is the uppermost portion of the frame structure

50 that includes 24 as shown in Figure 11 and the lower casing is the lowermost portion of the frame structure 52 that includes 26 as shown in Figure 11), a button operation portion formed on an upper part of the main body frame (106), a connecting projection (100) integrally formed with the button operation portion capable of moving together with the button operation portion (see Figures 8a-8b; paragraph 26), and a frame portion (12) pivotably connected with the nozzle assembly (paragraph 18) having a connecting groove capable of receiving the connecting projection therein (96). Regarding claim 4, the main body (22) comprises a handle portion to permit a user to grab on the upper part (20; paragraph 18). Regarding claim 7, the main body (22) further comprises a communicating member disposed at a bottom part of the main body (58). Regarding claim 11, the frame portion further includes at least one supporter formed on at least one side thereof to provide support (68, 66). Regarding claim 14, the frame portion has wheels on both sides of the bottom thereof (18). Regarding claim 15, the frame portion has a frame handle portion extending upwardly from the top of the frame portion (16; Figure 1) and a handle recess corresponding to the button operation portion of the main body (Figure 3, 16 has somewhat of a recess for receiving both 12 and 28).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harmen, US 2002/0162188 as applied to claim 1 in view of Dyson, US 5,145,499.

Harmen discloses all elements above, however does not include that the main body further includes an on/off switch to be located at a front side of the main body.

Dyson teaches a cyclonic vacuum cleaner that includes an on/off switch (135) on a front side of a main body having a cyclone dust collector in order to provide a control for a user for activating power of the vacuum (Column 20 Lines 30-35).

It would have been obvious for one of ordinary skill in the art to modify the front side of the main body of Harmen to further include an on/off switch, as Dyson teaches, to provide a switching means for the user to activate electrical power from a source to operate the vacuum.

***Allowable Subject Matter***

5. Claims 2-3, 6, 8-9, 12, and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter:

None of the prior art made of record includes a vacuum cleaner comprising a nozzle assembly, main body having a cyclone dust collector, a dust receptacle, a main body frame having an upper casing and a lower casing, a button operation portion formed on an upper part of the main body frame, and a connecting projection integrally formed with the button operation portion capable of moving together with the button operation portion, and a frame portion pivotably connected with the nozzle assembly and having a connecting groove capable of receiving the connecting projection therein and a button operation portion body which is semicircular, a biasing member, a pressing button integrally formed with the button operation portion body at a top part thereof, a guide extended from one side of the button operation portion or a main body having a rotatable first cord holder and a stationary second cord holder formed at a predetermined distance from the first cord holder or a rear portion that comprises a flexible hose capable of being connected to the communicating member, a hose supporting member, a discharging grill or that each supporter has a mounting guide on one side of the supporter.

US 2002/0162188 to Harmen, US 6,735,818 to Hamada et al., and US 6,859,975 to Ohta et al. does not include a button operation portion that is semicircular, a guide

extended from one side of the button operation portion, a main body having cord holders, a rear portion of the main body having a flexible hose, a hose supporting member, or a discharging grill, or that each supporter has a mounting guide.

US 6,839,934 to Houghton et al. includes a similar vacuum that is convertible and connects to a separate vacuum cleaner body that further includes a nozzle. Also, Houghton et al. discloses a semicircular button operation portion body (31) and an integral connecting projection (151) on an upper casing of a main body and a power switch connected to a front part of the main body. Houghton et al. does not disclose a main body that has a cyclone dust collector or a frame portion having a connecting groove capable of receiving the connecting projection therein.

### ***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura C. Guidotti whose telephone number is (571) 272-1272. The examiner can normally be reached on Monday-Thursday, 7:30am - 5pm, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on (571) 272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

*Laura C Guidotti*  
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Patent Examiner  
Art Unit 1744

lcg